



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/613,905	07/04/2003	Michael Harville	200312252-2	7196
22879 7590 04/09/2007 HEWLETT PACKARD COMPANY P O BOX 272400, 3404 E. HARMONY ROAD INTELLECTUAL PROPERTY ADMINISTRATION FORT COLLINS, CO 80527-2400			EXAMINER BIAGINI, CHRISTOPHER D	
			ART UNIT 2142	PAPER NUMBER
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		04/09/2007	PAPER	

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<p align="center">Office Action Summary</p>	<p>Application No.</p> <p align="center">10/613,905</p>	<p>Applicant(s)</p> <p align="center">HARVILLE ET AL.</p>	
	<p>Examiner</p> <p align="center">Christopher D. Biagini</p>	<p>Art Unit</p> <p align="center">2142</p>	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 July 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-24 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-24 is/are rejected.
- 7) ☐ Claim(s) ~~1-10 and 22~~ is/are objected to. AL
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 30 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| <p>1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)</p> <p>2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)</p> <p>3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)</p> <p> Paper No(s)/Mail Date <u>1/25/2005</u>.</p> | <p>4) <input type="checkbox"/> Interview Summary (PTO-413)</p> <p> Paper No(s)/Mail Date. _____.</p> <p>5) <input type="checkbox"/> Notice of Informal Patent Application</p> <p>6) <input type="checkbox"/> Other: _____.</p> |
|---|---|

DETAILED ACTION

Claim Objections

1. Claim 1 is objected to because of the following informalities: a comma missing on line 9 (between the words "components" and "enabling") renders the language of the claim grammatically incorrect. Appropriate correction is required.
2. Claims 10 and 22 are objected to because of the following informalities: the phrase "to enabling" on line 3 of each claim is grammatically incorrect. The Examiner recommends rewording the phrase to "to enable." Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 11 and 23 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.
5. Where applicant acts as his or her own lexicographer to specifically define a term of a claim contrary to its ordinary meaning, the written description must clearly redefine the claim term and set forth the uncommon definition so as to put one reasonably skilled

in the art on notice that the applicant intended to so redefine that claim term. *Process Control Corp. v. HydReclaim Corp.*, 190 F.3d 1350, 1357, 52 USPQ2d 1029, 1033 (Fed. Cir. 1999). The term "socket" in claims 11 and 23 is used by the claim to mean "a module for receiving and decompressing streaming media" (see discussion of "ears" on pp. 37-38 of Applicant's specification), while the accepted meaning is "an identifier for a particular service on a particular node on a network" (see the Microsoft Computer Dictionary, 5th Edition). The term is indefinite because the specification does not clearly redefine the term.

6. For the purposes of this examination, the limitation "input communication socket for decompressing said streaming media" will be interpreted to mean "a module for receiving and decompressing said streaming media."

7. Claims 12 and 24 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

8. Where applicant acts as his or her own lexicographer to specifically define a term of a claim contrary to its ordinary meaning, the written description must clearly redefine the claim term and set forth the uncommon definition so as to put one reasonably skilled in the art on notice that the applicant intended to so redefine that claim term. *Process Control Corp. v. HydReclaim Corp.*, 190 F.3d 1350, 1357, 52 USPQ2d 1029, 1033 (Fed. Cir. 1999). The term "socket" in claims 12 and 24 is used by the claim to mean "a module for compressing and sending streaming media" (see discussion of "ears" on pp.

37-38 of Applicant's specification), while the accepted meaning is "an identifier for a particular service on a particular node on a network" (see the Microsoft Computer Dictionary, 5th Edition). The term is indefinite because the specification does not clearly redefine the term.

9. For the purposes of this examination, the limitation "input communication socket for compressing said streaming media" will be interpreted to mean "a module for compressing and sending said streaming media."

Claim Rejections - 35 USC § 102

10. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

11. Claims 1-2, 5-10, 13-14, and 17-22 are rejected under 35 U.S.C. 102(e) as being anticipated by Lai et al. (US Pat. No. 6,407,680, hereinafter "Lai").

12. As to claim 1, Lai shows a method for managing a streaming media service, said method comprising: receiving a request for a streaming media service from a client (see step 502 in Fig. 5A and col. 14, lines 42-44), said streaming media service comprising a

plurality of media services components (comprising transcoding, transmitting, and streaming: see Fig. 2); determining which media service component of said plurality of media services components to assign to a service node of a plurality of service nodes (the nodes comprising machines in machine farm 216: see col. 15, lines 43-50) of a network (for example, a packet-switched computer network: see Fig. 1 and col. 8, lines 11-16); and informing each service node assigned to perform a media service component of said plurality of media services components (comprising assigning a task to a machine: see step 512 and col. 15, lines 38-43), enabling said streaming media service to be performed on a streaming media (see steps 516-524 in Fig. 5B and col. 16, lines 46-49).

13. As to claim 13, Lai shows a system for managing a streaming media service, said system comprising: a plurality of service nodes (comprising the machines in machine farm 216: see col. 15, lines 43-50) for performing a streaming media service on streaming media, said streaming media service comprising a plurality of media services components (comprising transcoding, transmitting, and streaming: see Fig. 2); a client for requesting said streaming media service (client 102); a manager (resource manager 208) coupled to said plurality of service nodes of a network and said client and for determining which service node to assign to perform each media service component of said plurality of media services components (comprising assigning a task to a machine: see step 512 and col. 15, lines 38-43); and a service builder (task manager 206) coupled to said manager and for communicating a list of said plurality of media

Art Unit: 2142

services components to said manager (the list comprising a set of tasks: see step 510 and col. 15, lines 27-38).

14. As to claims 2 and 14, Lai shows the limitations of claims 1 and 13 as applied above, and further shows wherein said streaming media is selected from video, audio, multimedia, and text (see Table 1 on columns 18-20).

15. As to claims 5 and 17, Lai shows the limitations of claims 1 and 13 as applied above, and further shows wherein said determining is based on load on said network (see col. 15, lines 50-53).

16. As to claims 6 and 18, Lai shows the limitations of claims 1 and 13 as applied above, and further shows wherein said determining is based on load on each service node of said plurality of service nodes (the load comprising CPU utilization: see col. 15, lines 43-50).

17. As to claims 7 and 19, Lai shows the limitations of claims 1 and 13 as applied above, and further shows wherein said determining is based on an existing streaming media service on said network (comprising using software residing on content provider client 104 instead of a transmitting server in machine farm 216: see col. 10, lines 44-49).

18. As to claims 8 and 20, Lai shows the limitations of claims 1 and 13 as applied above, and further shows wherein said determining is based on a previously assigned media service component (comprising not assigning a transcoding server when one had previously been assigned for a particular set of media content: see col. 11, line 65 to col. 12, line 6).

19. As to claims 9 and 21, Lai shows the limitations of claims 1 and 13 as applied above, and further shows wherein said receiving said request is through a service portal (viewer web-server interface 202: see Fig. 2 and col. 14, lines 42-44).

20. As to claims 10 and 22, Lai shows the limitations of claims 1 and 13 as applied above, and further shows wherein each of said plurality of service nodes generates an input communication socket and an output communication socket to enable communication between assigned service nodes (inherently disclosed as being a necessary part of the process by which the servers receive and send data from other servers, as it is necessary to create input and output sockets to receive and send data over a network). See col. 10, lines 19-33 and col. 16, line 46 to col. 17, line 60.

21. Note that in addition to enabling communication between assigned service nodes, the input and output communication sockets enable retrieving media content and sending it to a viewer client. See col. 15, lines 30-35.

Claim Rejections - 35 USC § 103

22. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

23. Claims 3-4, 15-16, 11-12, and 23-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lai (US Pat. No. 6,407,680) in view of Wei Tsang Ooi et al. ("Distributing Media Transformation Over Multiple Media Gateways," hereinafter "Ooi").

24. As to claims 3 and 15, Lai shows the limitations of claim 1 as applied above, but does not show wherein said determining is based on location of said client.

25. Ooi shows assigning a media service component to a service node based on the location of a client (comprising assigning a computation that increases bit-rate to a gateway near the receiver: see last paragraph of Introduction). It would have been obvious to one of ordinary skill in the art at the time of the invention to modify the invention of Lai with the determination process of Ooi in order to minimize bandwidth consumption.

26. As to claims 4 and 16, Lai shows the limitations of claim 1 as applied above, but does not show wherein said determining is based on bandwidth of said network. Ooi shows assigning a media service component to a service node based on bandwidth of a

network (comprising using an entity to transform media streams into lower bit-rates for slow links: see first paragraph of Introduction). It would have been obvious to one of ordinary skill in the art to modify the invention of Lai with the determination process of Ooi in order to provide a better user experience to users of slow communication links.

27. As to claims 11 and 23, Lai shows the limitations of claims 10 and 22 as applied above, but does not show wherein said input communication socket is for decompressing said streaming media.

28. Ooi shows a group of assigned service nodes (comprising media gateways: see Fig. 1A), each of which has generated a module for receiving and decompressing streaming media (note that as described in 1.4, each gateway must have software to decompress a media stream). It would have been obvious to one of ordinary skill in the art to modify the invention of Lai with the media gateways and modules of Ooi in order to distribute the load of transcoding media among multiple devices. See paragraph 3 of section 1.1.

29. As to claims 12 and 24, Lai shows the limitations of claims 10 and 22 as applied above, but does not show wherein said input communication socket is for decompressing said streaming media.

30. Ooi shows a group of assigned service nodes (comprising media gateways: see Fig. 1A), each of which has generated a module for compressing and sending streaming media (note that as described in 1.4, each gateway must have software to

Art Unit: 2142

compress a media stream). It would have been obvious to one of ordinary skill in the art to modify the invention of Lai with the media gateways and modules of Ooi in order to distribute the load of transcoding media among multiple devices. See paragraph 3 of section 1.1.

Conclusion

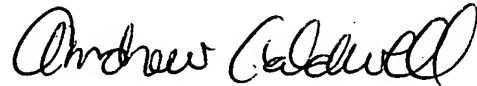
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher D. Biagini whose telephone number is (571) 272-9743. The examiner can normally be reached on M-R 7:30-5, 7:30-4 alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Caldwell can be reached on (571) 272-3868. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2142

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Christopher Biagini
(571) 272-9743



ANDREW CALDWELL
SUPERVISORY PATENT EXAMINER